

Remarks

The various parts of the Office Action (and other matters, if any) are discussed below under appropriate headings.

Allowable Subject Matter

The allowance of claims 1-11 and 20-25 is noted with appreciation.

Claim Rejections - 35 USC § 102

Claims 12-15 were rejected under 35 USC §102 as being anticipated by U.S. Patent No. 5,955,884 (Payton).

Claim 12 recites an electromagnetic survey method for surveying subterranean strata beneath the seafloor. As understood, the Payton patent is exclusively related to land surveying. Consequently, the "deploying" feature clearly is not met, since it specifies deploying a horizontal electric dipole transmitter at or above the seafloor.

The skilled person would readily appreciate the fact that Payton is restricted to land surveys. Figure 1, for instance, shows a truck on dry land with a drilling rig also mounted on land. Figure 8 similarly indicates a land situation.

Moreover, Payton identifies in column 1, lines 58 to 65, a "major problem" relating to the strong coupling between the transmitter and receiver known as the direct mode. This direct mode only exists for land surveying. Specifically, it does not exist for seafloor surveys, because the direct mode is very strongly attenuated in the sea water and as a result does not propagate from the transmitter to the receiver. This is well known to the skilled person. Consequently, the above-mentioned text clearly indicates to a person having ordinary skill in the art that Payton is solely concerned with land surveying and is not considering seafloor surveying.

At column 11, lines 4 to 14, the same point is also evident to a person having ordinary skill in the art. At lines 12 to 13 it is stated that "special surface site access and surface preparation are not required." The skilled person would understand that this is a reference to land surveying in which, if surface measurements are made, it is necessary to undertake laborious preparations in order to electrically contact the transmitter electrodes to the ground. By contrast, in the marine case, the sea water can be used to automatically couple the electromagnetic energy into the subterranean strata from a transmitter suspended in sea water above the seafloor.

It is further noted that Payton, as understood, is exclusively concerned with downhole measurements in which both the transmitter and receiver are located down the hole. By contrast, claim 12 specifies that the horizontal electric dipole transmitter is deployed at or above the seafloor. This is a further technically significant distinction over Payton.

In view of these clear distinctions between what is set forth in claim 12 and what is disclosed in Payton, it is respectfully submitted that the method recited in claim 12 is not anticipated by Payton.

The claims depending from claim 12 recite still further features not found in a combination similar to that claimed. Inasmuch as the dependent claims are allowable for at least the same reasons as the independent claim from which they depend, the Examiner's comments in respect thereof need not be addressed and this should not be construed to be an acquiescence in the contentions made by the Examiner.

Conclusion

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Respectfully submitted,

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